EMULEX®
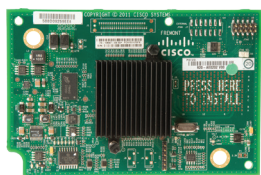
CONNECTIVITY

Cisco® UCS CNA M72KR-E Emulex Converged Network Adapter

SIMPLIFIED NETWORKING, TRUSTED SAN INTEROPERABILITY AND INCREASED BUSINESS AGILITY
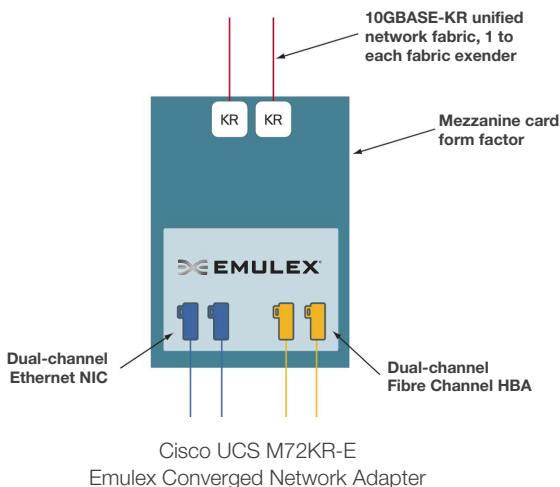
Cisco UCS CNA M72KR-E Emulex Converged Network Adapter

Cisco Unified Computing System Overview

The Cisco Unified Computing System™ is a next-generation data center platform that unites compute, network, storage access, and virtualization into a cohesive system designed to reduce total cost of ownership (TCO) and increase business agility. The system integrates a low-latency, lossless 10 Gigabit Ethernet unified network fabric with enterprise-class, x86-architecture servers. The system is an integrated, scalable, multi-chassis platform in which all resources participate in a unified management domain.

Product Overview

The Cisco UCS CNA M72KR-E Emulex Converged Network Adapter is a high-performance 10Gbps Fibre Channel over Ethernet (FCoE) mezzanine-card adapter that consolidates traffic for networking, Fibre Channel, and FCoE storage for Cisco UCS B-Series Blade Servers. The Cisco UCS CNA M72KR-E supports a common 10 Gigabit Ethernet infrastructure for unified networking and storage; extends Cisco's standards-based unified network fabric; reduces capital expenditures (CapEx) for adapters, switches, and cables; and reduces operating expenses (OpEx) for power, cooling, and IT administration.

Features and Benefits

The Cisco UCS M72KR-E provides both 10 Gigabit Ethernet and 8Gbps Fibre Channel functions using drivers from Emulex:

- Risk mitigation through compatibility with current Emulex adapter-based SAN environments and drivers
- Protects investments in existing server, network,storage and facilities assets
- Reduced TCO through consolidation of LAN and SAN traffic over the same mezzanine card and fabric, reducing the overall number of network interface cards (NICs), HBAs, cables, and switches
- Integrated management with Cisco UCS Manager

Enterprise Ready

- Allows customers to use existing Emulex HBA stacks and drivers for storage

Unified I/O

- Helps reduce TCO by consolidating the overall number of NICs, HBAs, cables, and switches because LAN and SAN traffic run over the same mezzanine card and fabric

Network architecture

- Provides redundant path to fabric interconnect using dual 10 Gigabit Ethernet ports to the fabric carrying both Fibre Channel and Ethernet traffic

Unified management

- Through Cisco UCS Manager, automatically discovers blades and the mezzanine cards on the blades

Advanced error checking

- End-to-end data protection with hardware parity, CRC, ECC and other advanced error checking and correcting ensure that data is safe from corruption

More virtual machines per server

- Protocol offloads for TCP/IP and FCoE enable more VMs per server, providing greater cost savings for server virtualization

10GBASE-KR unified network fabric, 1 to each fabric exender

Mezzanine card form factor

EMULEX®

Dual-channel Ethernet NIC

Dual-channel Fibre Channel HBA

Cisco UCS M72KR-E Emulex Converged Network Adapter

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Cisco UCS CNA M72KR-E
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Platform Support and Compatibility

The Cisco UCS M72KR-E mezzanine card is designed specifically for Cisco UCS B-Series Blade Servers and works in a dedicated environment with Cisco UCS Manager.

Cisco Unified Computing Services

Using a unified view of data center resources, Cisco and our industry-leading partners deliver services that accelerate your transition to a unified computing architecture. Cisco Unified Computing Services help you quickly deploy your data center resources, simplify ongoing operations, and optimize your infrastructure to better meet your business needs. For more information about these and other Cisco Data Center Services, visit www.cisco.com/go/unifiedcomputingservices.

Why Cisco?

The Cisco Unified Computing System continues Cisco's long history of innovation in delivering integrated systems for improved business results based on industry standards and using the network as the platform. Recent examples include IP telephony, LAN switching, unified communications, and unified I/O. Cisco began the unified computing phase of our Data Center 3.0 strategy several years ago by assembling an experienced team from the computing and virtualization industries to augment our own networking and storage access expertise. As a result, Cisco delivered foundational technologies, including the Cisco Nexus® Family, supporting unified fabric and server virtualization. The Cisco Unified Computing System completes this phase, delivering innovation in architecture, technology, partnerships, and services. Cisco is well positioned to deliver this innovation by taking a systems approach to computing that unifies network intelligence and scalability with innovative application-specific circuits (ASICs,) integrated management, and standard computing components.

SPECIFICATIONS

Standards

· ANSI INCITS T11 FC-BB-5, FC-GS-4, FC-TAPE, and FCP-3, FC-FS-2, FC-LS
· PCI Express base spec 2.0, PCI Bus Power Management Interface, rev. 1.2, Advanced Error Reporting (AER)
· IEEE 802.3ae (10Gbps Ethernet)
· IEEE 802.1q (VLAN)
· IEEE 802.1p (QoS/CoS)
· IEEE 802.3ad (Link Aggregation)
· IEEE 802.3x (Flow Control)
· Data Center Bridging: Enhanced Transmission Selection, ETS (P802.1Qaz)
· Priority-based Flow Control, PFC (P802.1Qbb)
· Data Center Bridging Capabilities eXchange Protocol, CIN-DCBX and CEE-DCBX (P802.1Qaz)

FCoE Features

· Common driver for Universal CNAs (UCNAs) and host bus adapters (HBAs)
· N_Port ID Virtualization (NPIV)
· Support for FCoE Initialization Protocol (FIP) and FCoE Ethertypes
· Fabric-provided MAC addressing (FPMA) support
· 1024 concurrent port logins (RPIs) and 2048 active exchanges (XRIs) per port

Components

· Emulex Blade Engine 2 ASIC

Ports

· 2 x 10Gbps Ethernet and mezzanine connectors

Connectivity

· 1000BASE-BX and Cisco Unified Computing System Mid-plane

Performance

· 250,000 I/O operations per second (IOPS) per port

Network Management

· Cisco UCS Manager v1.3.1 or later

Physical Dimensions

· Length = 7.25 in. (18.4 cm)
· Width = 3.65 in. (9.3 cm)

Typical Power

· 13 watts (W)

Inlet Operating Temperature Range

· 50 to 95°F (10 to 35°C)

System Requirements

· The Cisco UCS CNA M72KR-E mezzanine card is designed for use only on Cisco UCS B-Series Blade Servers. Each half width server including the Cisco UCS B200 M1and M2 and UCS B230 M1 supports one mezzanine adapter, and each full width server including the Cisco UCS B250 M1 or M2 and UCS B440 M1 supports up to two adapters. The adapter is not designed or intended for other purposes.

Warranty Information

· Find warranty information at www.cisco.com on the Product Warranties page.

For More Information

· For more information about the Cisco UCS CNA M72KR-E Emulex Converged Network Adapter, visit www.cisco.com/en/US/products/ps10265 or contact your local Cisco representative.

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